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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/777,880

02/11/2004

Allan Madsen

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6697

7590

09/21/2006

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EXAMINER

HERRERA, DIEGO D

ART UNIT

PAPER NUMBER

2617

DATE MAILED: 09/21/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/777,880	Applicant(s) MADSEN, ALLAN	
	Examiner Diego Herrera	Art Unit 2617	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 2/11/2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) 7-12 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

This application contains claims 7-12 drawn to an invention nonelected without traverse in Paper No. 2. A complete reply to the final rejection must include cancellation of nonelected claims or other appropriate action (37 CFR 1.144) See MPEP § 821.01.

Priority

Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Response to Amendment

Examiner accepts amendments made to specification.

Response to Arguments

Applicant's arguments, see second paragraph on page 7, filed 6/29/2006, with respect to "cells" and "sectors" have been fully considered and are persuasive. The objection of the specification about this matter has been withdrawn.

Applicant's arguments filed 6/29/2006 have been fully considered but they are not persuasive.

In response to the applicant's arguments concerning claim 1, the applicant's features in the claim wherein a method for measuring received signal strength, in the mobile, by receiving identifiers from neighboring cells about

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information of signal strength exceeding a predetermined threshold which are from available cells for transmission. Furthermore, selecting from within the cells exceeding a predetermined threshold a signal from a non-selection of a cell having a same cell identity as another cell in the set of available cells, reads on the combination of Padovani et al. and Ville.

Padovani et al. and Ville, the combination, discloses a system that measures pilot signals (i.e. signal) strength, a technique which signals are received from different base stations in the near vicinity from adjacent for cellular communication. Signals have been identified from a set of signals; therefore, they have identifiers in order to be identified. The signal strength is determined and there are several evaluation procedures with the signal strength from a first predetermined level and from a second predetermined level.

In response regarding the dependent claims, the features are shown via the primary and secondary reference cited in the action, and as modified by Padovani et al. and Ville can be used because they are in the same field and teaching nearly identical systems.

Therefore, the argued features are written broad such that they read upon the cited references or are claiming the same limitations as the cited references.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which

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said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

3. Claims 1-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ville et al. (EP0930513 A2), and in view of Padovani et al. (US PATENT 5577022).

4. Regarding claim 1, Ville et al. discloses a method for forming a set of cells for time difference measurements (paragraph [0029], Ville teaches propagation delay difference method of measurement between serving station and targeted station) for a mobile terminal camped on a first cell of a cellular network and being in idle mode (paragraphs [0005]-[0006], Ville teaches method for mobiles in a cellular network camped receiving information about base stations availability), the method comprising the steps of:

- a. Receiving, at the mobile terminal, a first set of cell identifiers respectively associated with neighboring cells of the first cell, with each of the neighboring cells sending a radio signal (paragraph [0012] & [0015]);
- b. Measuring, at the mobile terminal, received signal strengths of the neighboring cells having identifiers which are included in the first set of cell

identifiers (paragraph [0007]-[0009],), with a number N of cells having a signal strength exceeding a predefined threshold constituting a set of available cells (paragraph [0012],);

c. Reading, at the mobile terminal, a synchronization channel for the set of available cells, thereby measuring time differences for the set of available cells (paragraphs [0015]-[0018], & [0026]-[0028],);

d. Reading, at the mobile terminal, synchronization channel for the set of cells, thereby measuring time differences for the set of cells (paragraph [0026]-[0028], Ville teaches measuring the time differences between base stations in cells).

e. However, Ville et al. do not disclose the following:

f. Selecting, at the mobile terminal, a second set of cells from the set of available cells using a predefined selection rule, the second set of cells including $M < N$ cells, wherein the predefined selection rule causes a non-selection of a cell having a same cell identity as another cell in the set of available cells if it is probable that the cell which is not selected and the another cell belong to one sectorized base station; and

g. However, Ville et al. do not teach the second set of cell selection among first selection of cells nor the sectorized base stations, nevertheless, Padovani et al. teaches a method for selection of cells among cells that have been selected previously to form a second set of cells and base stations (abstract, col. 4 lines: 5-41, col. 8 lines: 20-42, col. 7 lines: 14-27, 39-44, & 56-65; Padovani teaches the process of selecting

from a set of cells “pre-candidate” and then further selecting “candidate sets” hence first and then second selection of set of cells or sectors).

h. Therefore, it would have been obvious to a person of ordinary skill at the time the invention was made to modify the teachings of Villa et al. to specifically include the second set of cells from among a first selection of set of cells as taught by Padovani et al. for the purpose of reducing false alarms for a given pilot strength detection period (col. 10 lines: 63-67).

5. Consider claim 2, and as applied to claim 1 above, Ville et al. discloses wherein time differences at the mobile terminal are measured only for cells in the set of cells while an exit condition is not fulfilled (paragraph [0027]-[0028], Ville teaches the constant monitoring of call signals of all base stations in the vicinity in a determined time frame).

6. However, Ville et al. do not disclose the method being done for a second set of cells, nevertheless, Padovani et al. teaches the second set of cells (abstract, col. 4 lines: 5-41, col. 8 lines: 20-42, col. 7 lines: 14-27, 39-44, & 56-65; Padovani teaches the process of selecting from a set of cells “pre-candidate” and then further selecting to form a “candidate sets” from the “pre-candidate” hence first and then second selection of set of cells or sectors).

7. Therefore, it would have been obvious to a person of ordinary skill at the time the invention was made to modify the teachings of Villa et al. to specifically include the second set of cells from among a first selection of set of cells as taught by Padovani et al. for the purpose of reducing false alarms for a given pilot strength detection period (col. 10 lines: 63-67).

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8. Consider claim 3, and as applied to claim 2 above, Ville et al. discloses wherein the exit condition includes a counter exceeding a predefined limit value (paragraph [0027]-[0028], Ville teaches the activation of the mobile terminal after the location of the base station targeted is located by a minimum of two BTSs hence the counter has reached a define limit value).

9. Consider claim 4, and as applied to claim 2 above, Ville et al. discloses wherein the exit condition includes a timer exceeding a predefined time limit (paragraph [0027], Ville teaches the use of a timer or an internal clock used to synchronize the mobile with the base station, which is used as a preliminary requisite for the exit condition).

10. Consider claim 5, and as applied to claim 4 above, Ville et al. discloses wherein the exit condition includes the mobile terminal changing from idle mode to dedicated mode (paragraph [0028], Ville teaches the mobile going from inactive yet "on" to active and "on").

11. Consider claim 6, and as applied to claim 1 above, Ville et al. discloses wherein a cell from the set of available cells is selected one of:

- a. A base station identity code of the cell is equal to a base station identity code of any other cell from the set of available cells, and one of
 - i. A measured time difference of the cell deviates from measured time differences for other cells sharing the same base station identity code more than a predefined threshold, and
 - ii. A signal strength of the cell is largest among all cells sharing the same base station identity code and the measured time

difference of the cell deviates less than or equal to the predefined threshold.

12. However, Ville et al. do not disclose cell from the set of available cells is selected to the second set of cells whenever one of:

b. Nevertheless, Padovani et al. teaches a base station identity code of the cell is not equal to a base station identity code of any other cell from the set of available cells (abstract, col. 4 lines: 5-41, col. 8 lines: 20-42, col. 7 lines: 14-27, 39-44, & 56-65; Padovani teaches the process of selecting from a set of cells "pre-candidate" and then further selecting "candidate sets" hence first and then second selection of set of cells or sectors, fig. 1A, 2-3, & 5A-B, col. 7 lines: 13-27, & 56-67, col. 8 lines: 20-41, col. 12 lines: 40-60, col. 13 lines: 6-10 & 28-56, col. 15 lines: 1-13, Padovani teaches the use of predefined thresholds for selecting from one set of cells and base stations to create a second set of selected cells and signal strength is also considered by Padovani in selecting a second set of cells and base stations).

c. Therefore it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the teachings of Ville et al. to specifically include identity code of the cell not equal to a base station identity code of any other cell from the set of available cells as taught by Padovani et al. for the purposes of reducing false alarms for a given pilot strength detection period (col. 10 lines: 63-67).

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Diego Herrera whose telephone number is (571) 272-0907. The examiner can normally be reached on Monday-Friday, 6:30 AM-3:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kincaid G. Lester can be reached on (571) 272-7922. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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